



Department of Toxic Substances Control





Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

Gray Davis
Governor

MEMORANDUM

TO: Guenther Moskat, Chief
Office of Environmental Analysis, Regulations and Audits
Department of Toxic Substances Control
1001 "I" Street, Room 1-103, HQ-18
P.O. Box 806
Sacramento, California 95812-0806

FROM:  Shelia Lowe 
Unit Chief
Federal Facilities Unit B
Office of Military Facilities
Southern California Operations

DATE: October 12, 2001

SUBJECT: FINAL CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
DOCUMENTS FOR A PROPOSED REMOVAL ACTION AT
INSTALLATION RESTORATION (IR) SITE 5, UNIT 2, NAVAL AIR
STATION, NORTH ISLAND, CORONADO, CALIFORNIA

Please find enclosed the Notice of Determination package containing final CEQA documents for the proposed removal action at IR Site 5, Unit 2, Naval Air Station, North Island, Coronado, California. It includes a signed original and a copy of the following documents:

- 1) Notice of Determination
- 2) Negative Declaration Approval
- 3) Final Negative Declaration
- 4) Special Initial Study, De Minimis Impact Finding, and
- 6) Notice of Determination Filing Checklist (one copy).

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Guenthar Moskat, Chief
October 12, 2001
Page 2

Please review the package for completeness and file accordingly with the Office of Planning and Research. If you have any questions regarding this matter, please contact Mr. Daniel Cordero Jr. at (714) 484-5428.

Attachments

cc: Ms. Leticia Hernandez
Public Participation Specialist
Department of Toxic Substances Control
Cypress Office

CALIFORNIA ENVIRONMENTAL QUALITY ACT**NOTICE OF DETERMINATION
FILING CHECKLIST**

This checklist outlines all the required contents of the Notice of Determination (NOD) pursuant to the California Environmental Quality Act (CEQA) and all required information for filing and payment of filing fees through the Office of Environmental Analysis, Regulations and Audits (OEARA) - CEQA Tracking Center (CTC). For further information regarding NODs, Initial Studies, Negative Declarations, Environmental Impact Reports, Findings of De Minimis, and Certificates of Fee Exemption, contact OEARA at (916) 322-8162 or CALNET 492-8162.

INSTRUCTIONS:

- ☒ Review your NOD to assure it contains items 1 through 10
- ☒ If you are also filing a Finding of De Minimis, use the combined Notice of Determination/Certificate of Fee Exemption form available from PEAS. Do not attempt to file a Finding of De Minimis unless you have consulted PEAS while conducting your Initial Study, and have documented your analysis of De Minimis conditions in the Initial Study checklist.
- ☒ Fill in information requested in items 1, 3, 4, and 11 through 15
- ☒ Send this form along with items 16 through 21 to:

OEARA
CEQA Tracking Center
P O. Box 806
Sacramento, CA 95812-0806

CONTENTS OF AN NOD:

1. **Identification of the project including the common name, if any. Please also write the name of the project here.** Time-Critical Removal Action for Installation Restoration (IR) Site 5, Unit 2, Naval Air Station (NAS), North Island, San Diego County, California
2. **Signature of the Director, Deputy Director, or Branch Chief.** NODs for regulations should have the signature of the Director or one who is designated by the Director to approve regulations.
3. **State Clearinghouse Number.** The State Clearinghouse number is assigned by the Governor's Office of Planning and Research (OPR) State Clearinghouse when fifteen (15) copies of a proposed Negative Declaration or draft Environmental Impact Report are sent to them for responsible agency review. If you cannot locate this number, call the State Clearinghouse at (916) 445-0613, CALNET 485-0613. **Write the State Clearinghouse number here, and include the number in the NOD. 2001081015**
4. **Date on which the Director, Deputy Director, or Branch Chief approved the project, i.e., the date the permit, variance, Remedial Action Plan, Record of Decision, Standard 400 form (STD 400), etc., was signed by the Department. Write the date here and include the date in the NOD.** October 12, 2001 **Site Mitigation** - If both a Remedial Action Plan and a Record of Decision were approved, list both dates here, but only include the Remedial Action Plan date in the NOD.

5. **Location of the project.**
6. **Brief description of the project.**
7. **Determination that the project will or will not have a "significant effect on the environment" as that term is used in Section 15382 of Title 14 of the Natural Resources Code**
8. **Indication if either an EIR or a Negative Declaration has been prepared.**
9. **Address where the EIR or Negative Declaration may be examined.**
10. **If a determination was made that the project will have a significant effect on the environment, include in the NOD a statement of overriding consideration or a reference to where in the record the statement of overriding considerations is found. If the project will not have a significant effect, write "NA" next to the number 10 in this paragraph. Refer to Sections 15091, 15092, and 15093 of Title 14 of the Natural Resources Code.**

OTHER INFORMATION NEEDED FOR FILING OF NOD AND PAYMENT OF FEES:

11. Administrative Appeal Period

Directions for Permits: If there is no likelihood of an administrative permit appeal based on substantive comments received on the environmental concerns with the project, then **enter N/A**. If you enter a date here, the NOD will be held and will not be filed until after that date.

If there is a likely appeal, DTSC should not file the Notice of Determination until after the appeal is completed. **Enter the end date of the window for the filing of permit appeals in such cases**. This is normally 30 days after the permit was approved

The CEQA Tracking Center will contact you on that date regarding any appeals before filing the NOD. If an appeal has been filed and resolved, enter the date it was resolved below

Enter End Date of Administrative Appeal Filing Period, if Applicable:

Directions for Regulations: Indicate the date that the Governor's Office of Administrative Law sent the regulation to the Secretary of State. If you are submitting this form before that date, leave the item blank. The CEQA Tracking Center will hold the NOD and will not file it until it receives word that the regulations were received by the Secretary of State.

Enter End Date of Administrative Appeal Filing Period, if Applicable:

Directions for Site Mitigation projects: Leave this item blank. It is not applicable to your project.

12. **Index Number** (from time sheet) 5830
13. **PCA number** (from time sheet) 14740
14. **Site number and WP** (from time sheet) 400105-47
15. **Contact Information:**
Lead staff person Daniel Cordero Jr.

Telephone of lead staff person 714-484-5428

PROFS ID, if any, of lead staff person dcordero

Region of lead staff person 4

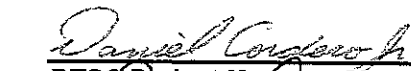

Lead staff person's supervisor Shelia Lowe

Supervisor's telephone 714-484-5446

Supervisor's PROFS ID slowe

DOCUMENTS TO SEND TO THE OEARA:

16. **The signed original NOD, or the signed original NOD/Certificate of Fee exemption form.** The NOD must contain all the elements outlined in Numbers 1 through 10 above. If exemption from NOD filing fees is being sought, use the combined Notice of Determination/ Certificate of Fee Exemption form available from OEARA, instead of a standard NOD. Do not attempt to file a Certificate of Fee Exemption or Finding of De Minimis unless you have documented your analysis of De Minimis conditions in the Initial Study checklist and have consulted OEARA before the responsible agency and public review periods.
17. **One copy of #16 above**
18. **One copy of the formal record declaring that the Department has approved the Negative Declaration or the Environmental Impact Report.** OEARA has a form that may be signed by a branch chief and used as the formal record.
19. **One copy of the approved final version of the Negative Declaration and Initial Study, or the approved final version of the Environmental Impact Report.**
20. **A Finding of De Minimis, if a Certificate of Fee Exemption is being filed.**
21. **A copy of number 20 above**

	<i>Hazardous Substances Engineer</i>	<i>714-484-5428</i>	<i>10-12-01</i>
DTSC Project Manager Signature	Title	Telephone #	Date
	<i>Branch Chief</i>	<i>(714) 484-5456</i>	<i>10/12/01</i>
DTSC Branch Unit Chief Signature	Title	Telephone #	Date

File Location: T:\Oeara\Ceqa\Forms\Nodfilingchecklist

March/ 2001

CALIFORNIA ENVIRONMENTAL QUALITY ACT**NOTICE OF DETERMINATION
CERTIFICATE OF FEE EXEMPTION**

To: Office of Planning and Research
P O. Box 3044
Sacramento, CA 95812-3044

From: Department of Toxic Substances Control
Office of Environmental Analysis, Regulations & Audits
1001 I Street, 22nd Floor
P O. Box 806
Sacramento, CA 95812-0806

Project Title: Time-Critical Removal Action Work Plan, Installation Restoration Site 5, Unit 2, Naval Air Station, North Island, San Diego, California

State Clearinghouse Number: 2001081015

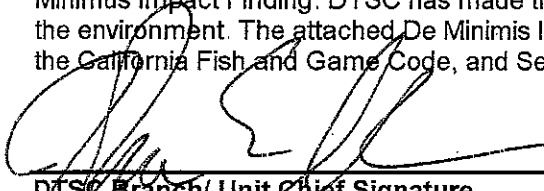
Contact Person and Telephone: Daniel Cordero Jr., (714) 484 -5428

Project Location (include County): Naval Air Station, North Island is located in the southern San Diego County, across San Diego Bay from the downtown area, on the northern end of Coronado. The city of Coronado adjoins the installation to the south

Project Description: The Department of the Navy is proposing an *in situ* chemical oxidation of contaminants in groundwater and soil below the groundwater table, excavation of vadose-zone soil is proposed to remove the limited source area above the groundwater table in and near Sherman Road.

Date project Approved: October 12, 2001

The attached Notice of Determination is filed in compliance with Public Resources Code, Division 13, Section 21108. The Department of Toxic Substances Control (DTSC), as Lead Agency, has approved the above described project and attached Negative Declaration and has certified the attached De Minimis Impact Finding. DTSC has made the finding that the project will not have a significant effect on the environment. The attached De Minimis Impact Finding was prepared pursuant to Section 711.4 of the California Fish and Game Code, and Section 753.5 of Title 14, California Code of Regulations.


DTSC Branch/ Unit Chief Signature


Title

(714) 484-5456
Telephone #

10/12/01
Date

Date Received for Filing and Posting at OPR: _____

CALIFORNIA ENVIRONMENTAL QUALITY ACT**NEGATIVE DECLARATION
APPROVAL**

Project Title: Time-Critical Removal Action for Installation Restoration (IR) Site 5, Unit 2, Naval Air Station (NAS), North Island, San Diego County, California.

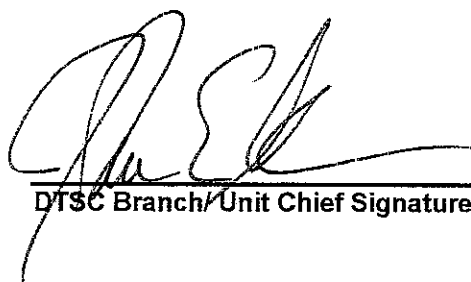
State Clearinghouse Number: 2001081015

Contact Person and Telephone #: Daniel Cordero Jr., (714) 484-5428

Project Location (include County): Naval Air Station North Island is located in southern San Diego County, across San Diego Bay from the downtown area on the northern end of Coronado. The city of Coronado adjoins the installation to the south.

Project Description: The Department of the Navy is proposing an *in situ* chemical oxidation of contaminants in groundwater and soil below the groundwater table, excavation of vadose-zone soil is proposed to remove the limited source area above the groundwater table in and near Sherman Road.

The Department of Toxic Substances Control has found, on the basis of the Initial Study and comments received on the Negative Declaration, that there is no substantial evidence that this project will have a significant effect on the environment.

	Branch Chief	(714) 484-5456	10/12/01
DTSC Branch/Unit Chief Signature	Title	Telephone #	Date



Department of Toxic Substances Control



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

Gray Davis
Governor

NEGATIVE DECLARATION for

Time-Critical Removal Action Work Plan

Installation Restoration Site 5, Unit 2

Naval Air Station, North Island, San Diego, California

Project Proponent:

Naval Air Station North Island
San Diego, California

Contact: Mark Bonsavage
Department of the Navy
Southwest Division
Naval Station San Diego
2585 Callagan Highway
San Diego, California 92136-5798
(619)556-7315

Project Description:

The Department of the Navy is proposing an *in situ* chemical oxidation of contaminants in groundwater and soil below the groundwater table, excavation of vadose-zone soil is proposed to remove the limited source area above the groundwater table in and near Sherman Road.

Project Location:

Naval Air Station North Island is located in southern San Diego County, across San Diego Bay from the downtown area on the northern end of Coronado. The city of Coronado adjoins the installation to the south.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

DRAFT NEGATIVE DECLARATION
Removal Action Work Plan
Naval Air Station North Island


Findings of Significant Effect on Environment:

DTSC has determined that the project will not have a significant effect on the environment as defined in the Public Resources Code Section 21068.


A copy of the Initial Study which supports this finding is attached.

Mitigation Measures

As explained in the attached Initial Study, this project does not require mitigation measures.

Signature 
Daniel Cordero Jr, Project Manager
Office of Military Facilities
Department of Toxic Substances Control

Date 10-12-01

Signature 
John E. Scandura, Chief
Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

Date 10/12/01



Department of Toxic Substances Control



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630

Gray Davis
Governor

DE MINIMIS IMPACT FINDING FOR

Time-Critical Removal Action Work Plan

Installation Restoration Site 5, Unit 2

Naval Air Station, North Island, San Diego, California

Project Proponent:

Naval Air Station, North Island
San Diego, California

Contact:

Mark Bonsavage
Department of the Navy
Southwest Division
Naval Station San Diego
2585 Callagan Highway
San Diego, California 92136-5798
(619)556-7315

Project Description:

The Department of the Navy is proposing an *in situ* chemical oxidation of contaminants in groundwater and soil below the groundwater table, excavation of vadose-zone soil is proposed to remove the limited source area above the groundwater table in and near Sherman Road.

Initial Study Information:

The initial study has been conducted by DTSC to evaluate the possibility of significant effect. A copy of the initial study and checklist are attached.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

DE MINIMIS IMPACT FINDING
Removal Action Work Plan
Naval Air Station North Island

Declaration of No Evidence of Potential Adverse Effect:

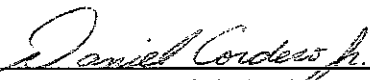
When considering the initial study and the record, there is no evidence before DTSC that the proposed project will have potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depends.

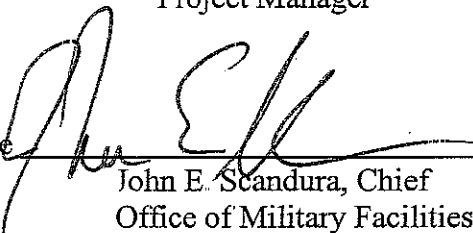
Declaration of Rebutment of Presumption:

DTSC has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in Section 753.5(d), Title 14 of the California Code of Regulations.

Certification:

The Department of Toxic Substances Control certifies that it, as lead agency, has made the above findings of fact and that based upon the initial study and upon the record, the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code. Signature verifying this certification is attached.

Signature  Date 10-12-01
Daniel Cordero Jr.
Project Manager

Signature  Date 10/12/01
John E. Scandura, Chief
Office of Military Facilities
Southern California Operations

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SPECIAL INITIAL STUDY

FOR

*Time-Critical Removal Action Work Plan
Installation Restoration Site 5, Unit 2
Naval Air Station, North Island, San Diego, California*

The Department of Toxic Substances Control (DTSC) has completed the following Special Initial Study for this project in accordance with the California Environmental Quality Act (§21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations). This Special Study has also been used to satisfy the requirements of §711.4, Fish and Game and §753.5, Title 14, Code of California Regulations relating to filing of environmental fees.

I. PROJECT INFORMATION

Project Name:

Time-Critical Removal Action for Installation Restoration (IR) Site 5, Unit 2, Naval Air Station, North Island (NASNI), San Diego County, California.

Site Location:

NASNI is located in San Diego County, California, west of the City of Coronado on the tip of the Silver Strand Peninsula (Figure 1, Vicinity Map). The base is surrounded by water on three sides: the Pacific Ocean to the south and the San Diego Bay to the west and north. NASNI is accessible by land through the City of Coronado from San Diego via the Coronado Bay Bridge and from the City of Imperial Beach via the Silver Strand Highway, State Route 75. NASNI incorporates approximately 2,520 contiguous acres of land (Brown and Caldwell, 1983).

IR Site 5, Unit 2, is located in the southeastern section of NASNI, southeast of the intersection of Sherman and Rogers Roads, and almost entirely within the final flight approach to one of the NASNI runways (Figure 1). The roughly 3.7 acre site lies adjacent to the NASNI golf course between two putting greens located north and south of the site. Improvements currently within the site include an asphalt golf cart path, several dirt roads and landing lights associated with the runway. A slough that is in contact with the Pacific Ocean is located south and downgradient of the site (Figure 1).

Contact Person/Address/Phone Number:

Mr. Daniel Cordero, Jr.
Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630
(714) 484-5428

Project Description:

NASNI proposes to conduct a time critical removal action at the Installation Restoration Program Site 5, Unit 2, in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), under 42 U.S. Code (USC) §9604, 10 USC §2705, and Executive Order 12580. The proposed removal action is subject to the requirements of the California Health and Safety Code, Chapter 6.8. Pursuant to the Public Resources Code Section 21067, DTSC, as the lead state regulatory agency is required to comply with the California Environmental Quality Act.

The Navy has proposed an Interim action to reduce the risk to exposure from contaminated groundwater. This Interim action is not the final remedy for IR Site 5, a final remedy will be chosen during the Remedial Investigation/Feasibility stage of the cleanup process. The scope of the proposed Interim TCRA is to achieve source area reduction of chlorinated aliphatic hydrocarbons in the soil and groundwater at IR Site 5, Unit 2. IR Site 5 is segregated into two units. Unit 1 corresponds to the former municipal landfill that was operated at IR Site 5 and is predominately overlain by the golf course. Unit 2 is the focus of the proposed Interim TCRA and corresponds to the vicinity of the former hazardous waste disposal pits and the area of the VOC groundwater plume. The source of the groundwater plume is VOC-impacted soil that lies primarily below the groundwater table in the vicinity of the two former disposal pits depicted on Figure 2. The proposed Interim TCRA is necessary to reduce future human and ecological exposure to the VOC-impacted groundwater, by minimizing the spread of groundwater contamination, and reducing the probability of contaminated groundwater discharging into a nearby slough which discharges to the Pacific Ocean. The scope of the proposed Interim TCRA will be achieved by in situ chemical oxidation of the groundwater plume and removal of approximately 500yd³ (750 tons) of contaminated soil. Five hundred cubic yards of soil is approximately twenty loads of soil to be transported through the city of Coronado. The daily maximum number of trucks leaving the base will not exceed city of Coronado limits, as agreed to by the city of Coronado and NASNI. The excavated area will be backfilled with clean materials, the source of which will be determined prior to fieldwork. Total time required for the entire project is approximately nine months.

Based on the comparative analysis of remedial alternatives presented in the Action Memorandum (AM) (DON, 1999), the response action selected to mitigate threats to public health, welfare, and the environment is remediation of the VOC groundwater plume by *in situ* chemical oxidation.

Chemical oxidation is a process by which the oxidation state of a contaminant is increased while the oxidation state of the reactant is lowered. This alternative has been selected for the following reasons:

- Effective treatment of the VOC-impacted groundwater and water-saturated soil in the most rapid manner with the least site disruption when compared to all other alternatives evaluated
- No excavation of VOC-impacted soil below the groundwater table
- Minimal site disruption and impact to the nearby residents
- Minimal waste generation.

The technology has been successfully pilot tested at the site; pilot test results are presented in the site remedial action work plan (RAW) (OHM, 2001).

In addition to the *in situ* chemical oxidation of contaminants in groundwater and soil below the groundwater table, excavation of 500yd³ (750 tons) of vadose-zone soil is proposed to remove the limited source area above the groundwater table in and near Sherman Road (Figure 2).

Activities and timeframes included in the proposed Interim TCRA are summarized as:

- Laboratory bench tests using soil and groundwater samples collected from IR Site 5, Unit 2, to confirm that *in situ* chemical oxidation is a viable remedial technology and to develop preliminary operational parameters (e.g., chemical concentrations and injection rates)-completed
- Pilot tests to develop full-scale design parameters (e.g., rate of chemical oxidation, well spacing, and refinement of the operational parameters determined in the pilot test)-completed
- Remediation system design and equipment procurement-one month
- Limited vadose-zone excavation in and near Sherman Road-one month
- Offsite disposal of VOC-impacted soil-one month
- Backfill and compaction of the excavation with clean imported fill and excavated soil-one month
- Restoration of pavement to match pre-existing condition-one week
- Construction of injection wells and chemical storage area-two weeks
- Pre-injection groundwater sampling and analysis-one week
- Injection of the chemical oxidants-four months
- Post-treatment groundwater sampling and analysis-four months
- Preparation of removal action closure report.-three months

Agencies Having Jurisdiction Over the Project/Types of Permits Required:

Department of Toxic Substances Control
Regional Water Quality Control Board
NASNI PWC: Subsurface Operations permit
NASNI PWC: Excavation permit

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- | | |
|--|---|
| <input type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Removal Action Plan |
| <input type="checkbox"/> Permit Renewal | <input checked="" type="checkbox"/> Removal Action Workplan |
| <input type="checkbox"/> Permit Modification | <input type="checkbox"/> Interim Removal |
| <input type="checkbox"/> Closure Plan | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Regulations | _____ |

Program/Region Approving Project:

Department of Toxic Substances Control
Office of Military Facilities – Southern California Operations

Contact Person/ Address/ Phone Number:

Mr. Daniel Cordero Jr.
Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630
(714) 484-5428

III. ENVIRONMENTAL CONDITIONS POTENTIALLY AFFECTED

The items listed below identify environmental factors that were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigated."

- | | | |
|--|--|--|
| <input type="checkbox"/> Earth | <input type="checkbox"/> Risk of Upset | <input type="checkbox"/> Aesthetics |
| <input type="checkbox"/> Air | <input type="checkbox"/> Transportation/ Circulation | <input type="checkbox"/> Cultural/ Paleontological Resources |
| <input type="checkbox"/> Surface and Groundwater | <input type="checkbox"/> Public Services | <input type="checkbox"/> Cumulative Effects |
| <input type="checkbox"/> Plant Life | <input type="checkbox"/> Energy | <input type="checkbox"/> Population |
| <input type="checkbox"/> Animal Life | <input type="checkbox"/> Utilities | <input type="checkbox"/> Housing |
| <input type="checkbox"/> Land Use | <input type="checkbox"/> Noise | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Natural Resources | <input type="checkbox"/> Public Health and Safety | |

IV. ENVIRONMENTAL SETTING/IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental conditions that exist within the area affected by the proposed project and an analysis of whether or not those conditions will be potentially impacted by the proposed project. Preparation of the Environmental Setting and Impact Analysis sections follows guidance provided in the DTSC's Workbook For Conducting Initial Studies Under the California Environmental Quality Act (CEQA), May 1994 (Workbook).

This Initial Study also contains evidence to support the claim that this project will have absolutely no adverse impact on fish or wildlife or the habitat on which the fish or wildlife depend pursuant to the provisions of Title 14, CCR §753.5 (d). Areas of special concern to fish and wildlife are highlighted within the appropriate environmental factor in the following section. References used to support the following discussion and analysis are contained in Attachment A and cited within each environmental factor discussed below.

Mitigation measures that are made a part of the project (e.g., permit condition) or which are required under a separate Mitigation Monitoring Plan, that either avoid or reduce impacts to a level of insignificance, are identified in the analysis within each environmental factor.

1. *Earth (Workbook, page 11)*

Description of Environmental Setting:

North Island is interpreted as an outcrop of the Pleistocene Bay Point Formation that is overlain at its perimeter by artificial fill materials and Holocene beach deposits. The fill materials are predominately dredge materials from the San Diego Bay that were placed between the 1920s and 1950s. On the east side of North Island, the hydraulic fill was placed to fill a shallow embayment known as Spanish Bight. The fill was placed above a 3- to 5-foot thick layer of bay floor mud, composed of organic silts and clays. These sediments are referred to as the Spanish Bight sediments. The underlying Bay Point Formation sediments include sands, silts and clays.

Structurally, NASNI consists of sedimentary beds dipping gently to the west. Published geologic mapping has shown several nearly north-south trending faults, down thrown to the east, transecting NASNI and the City of Coronado. One of these faults, the north-south trending Spanish Bight Fault, passes through the former Spanish Bight. The former Spanish Bight embayment appears to have been formed by faulting that down dropped sediments within the embayment. Mapped faults do not coincide with the western and eastern sides of the former embayment [Remedial Investigation/RCRA Facility Investigation (RI/RFI)] (BNI, 1998).

IR Site 5, Unit 2, lies within the southwest end of the former Spanish Bight in a relatively flat area. The dredge materials underlying the site are predominantly silty sands that extend approximately 9 to 10 feet below ground surface where they are in contact with the Spanish Bight sediments. The western extent of the Spanish Bight sediment layer appears to trend north to south between S5-B-8 and S5-CPT-3, and between S5-B-11 and S5-B-9 (Figure 2).

Ref: RI/RFI

Analysis of Potential Impacts:

[Analysis must include the following concerns: 1) Changes to any riparian land or wetlands under state or federal jurisdiction?; 2) Changes to soil required to sustain habitat for fish and wildlife?]

In situ chemical oxidation activities are not anticipated to adversely impact soil at the site. The limited excavation proposed for the vadose-zone source area in and near Sherman Road is anticipated to encompass an aerial extent of approximately 3,600 square feet. The depth of the excavation will extend to the water table, which occurs approximately 4 to 5 feet below ground surface. Approved sloping and/or shoring will be used to stabilize the excavation. The work location is a flat area on top of compacted fill material. There are no buildings or other structures other than Sherman Road that will be effected by the excavation work. There is no possibility of a landslide, mudslide, or ground failure at the site due to excavation work proposed under this work plan. The excavation will be backfilled and compacted, which will prevent cave-ins after the project is completed. Sherman Road will be restored to its pre-construction condition.

The project site does not contain unique geologic or physical features, and the original topography will be restored during the backfilling process.

IR Site 5, Unit 2, is not riparian land or wetland. The changes to soil at the site will be to remove VOC-impacted soil from a limited area of the vadose zone and to remove VOCs from soil at and below the groundwater table using *in situ* chemical oxidation.

Ref: RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Air (Workbook, page 13)

Description of Environmental Setting:

The climate is mild and semi-arid, tempered by cool sea breezes. Temperatures are mild due to the moderating effects of the Pacific Ocean. July maximum temperatures average in mid 70's, while minimum temperatures drop into low 60's. January maximum temperatures average in mid 60's with minimums averaging in the upper 40's. The highest temperatures are generally associated with Santa Ana winds that occur during fall and winter. Temperatures above 90 degrees F and below 40 degrees F are infrequent. The average annual precipitation in the area is about 10 inches per year and can vary considerably from year to year. The precipitation occurs mainly in the winter months as cold fronts pass through the area. Summer and fall intrusions of subtropical moisture occasionally occur, but rainfall generally is not significant.

Ref: RI/RFI

Analysis of Potential Impacts:

[Analysis must address the following concerns: Degradation of any air resources that will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air?]

The removal action poses no discharge of air pollutants from major sources. During pilot testing of the *in situ* chemical oxidation technology at the site, air monitoring activities conducted for health and safety purposes did not indicate detectable VOC concentrations in the breathing zone at any location monitored. Therefore, release of VOCs to the air is not expected as a result of full scale implementation of the technology. However, the proposed limited excavation of the vadose zone in and near Sherman Road may cause a temporary increase in dust within the immediate area. The main toxic air contaminants that could potentially be released during the excavation work include trichloroethylene (TCE), tetrachloroethylene (PCE), vinyl chloride, and 1,2,3 trichloropropane or dust contaminated with these VOCs.

Excavation activities will be conducted in accordance with the San Diego County Air Pollution Control District's (APCD) rules and regulations pertaining to fugitive dust and organic compounds emissions. Standard construction methods to mitigate air emissions and fugitive dust will be utilized during the limited excavation activities, including wetting the soil and covering clean stockpiled soil with plastic sheeting.

Potential exposures and protection procedures for workers engaged in these construction activities are addressed in detail in the Site Health and Safety Plan (SHSP) (OHM, 2001) prepared in association with the RAW. Measures will be taken to reduce fugitive dust and organic compounds emissions and the associated impacts on workers during these activities. Water trucks and hoses will be available for dust control. Workers within the controlled area will wear appropriate safety equipment and take appropriate safety measures in accordance with the SHSP.

The short duration of the proposed excavation activities (approximately two weeks) and the adherence to APCD protocol during the activities will prevent any degradation of any air resources that would individually or cumulatively result in a loss of biological diversity among the plants and animals residing in the air.

Ref: RAW; SHSP

Findings:

Potentially Significant Impact	Potentially Significant Unless Mitigated	Potentially Significant Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3. Surface and Groundwater (Workbook, page 17)

Description of Environmental Setting:

Five shallow, man-made ponds located on the golf course represent the only surface water bodies on North Island. Two of the ponds are located adjacent to the northeast extent of the IR Site 5, Unit 2, plume. The water level in the ponds is maintained at an elevation of 10 to 11 feet MLLW. The ponds may provide a recharge source to the unconfined water table due to potential leakage from the ponds. Golf course irrigation is the main source of recharge to the unconfined water table.

Groundwater beneath NASNI, which is in hydraulic communication with the San Diego Bay and the Pacific Ocean, occurs in the Coronado Hydrologic Area of the Otay Hydrologic Unit [Regional Water Quality Control Board, Region 9 (RWQCB), 1996]. The water is saline to brackish, has been exempted as a source of drinking water, and has no designated beneficial uses (RWQCB, 1996). Groundwater occurs at depths of 4 to 6 feet below ground surface at IR Site 5, Unit 2, at an elevation of approximately seven feet above MLLW (OHM, 2001). Tidal influence on the water table elevation beneath the site is masked by the normal fluctuations of the groundwater table caused by precipitation, flooding, irrigation, and recharge (BNI, 1998).

Surface water collected from paved areas north and west of the site is transported through 81-inch and 57-inch diameter storm sewer lines that discharge at the slough (Outfall 16) and at the beach area south of the site. The slough was constructed during 1945 when the Spanish Bight was filled. It provides a path for storm sewer line discharge water to flow to the Pacific Ocean. During most of the year, the flow is restricted by a berm at the head of the beach. This berm can be breached by large volumes of water flowing through the storm sewer lines or by large waves from the Pacific Ocean (BNI, 1998).

The water supply for NASNI is imported through a pipeline from the City of San Diego. Drinking water is supplied by the City of Coronado, which receives its water from the City of San Diego distribution system.

Ref: RI/RFI; RAW

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Changes to riparian land, rivers, streams, watercourses and wetlands under state and federal jurisdiction?, or 2) Changes to any water resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that water?]

The removal action will not adversely impact the ocean waters or groundwater at or in the vicinity of the site. The removal action ultimately will protect the slough and remove VOCs from groundwater at the site.

Water consumption (e.g. chemical mixing and dust suppression) by this project will be minimal and will be supplied from existing golf course irrigation supply. There will be no changes to water resources that will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in the water. The project site is not riparian land or wetland.

Ref: RI/RFI; RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4. Plant Life (Workbook, page 20)

Description of Environmental Setting:

Site 5, Unit 2, lies adjacent to two well-traveled roads and is traversed by several dirt roads used by NASNI personnel to access and maintain runway-approach lights. An asphalt golf cart path crosses the site and provides golfers access to the putting greens located north and south of the site. The ground area within the runway approach is flat and largely vegetated with low-growing herbaceous species. The area is maintained by mowing so that there is no vegetation taller than a few inches. The area has had extensive surface disturbance in the past as a result of construction or other maintenance activities; however, the vegetative cover was estimated to be 90 percent during a site visit performed in 1996 (BNI, 1998).

Site 5, Unit 2, is known to contain one sensitive plant species, the Nuttall's lotus (*Lotus nuttallianus*), formerly a federal category 2 candidate and a California Native Plant Society (CNPS) List 1B species. According to the ecology survey results presented in the RI/RFI Report, about 100 plants of Nuttall's lotus have been observed growing mostly along the more-open edges of the site. There are no other sensitive plant species documented for Site 5, Unit 2.

The project proposes to collect soil samples to install approximately 50 wells to be used during chemical injection and monitoring activities. Drilling rigs are anticipated to be on site for soil sampling and well installations for approximately 20 working days in total. Temporary dirt roads may be developed to some of the injection wells if the wells cannot be adequately accessed for injection and monitoring activities utilizing the currently existing roads. In this case, a wheel loader will be utilized for road development as necessary. Trucks and any other heavy equipment needed on site will utilize the existing or temporary roads. Additionally, the proposed limited

excavation in and near Sherman Road poses little impact to environmental receptors because of its proximity to Sherman Road.

Ref: AM, RAW, RI/RFI

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Any adverse effect to native and non-native plant life?; 2) Effects to rare and unique plant life and ecological communities dependent on plant life?; 3) Any adverse effect to listed threatened and endangered plants?; 4) Effects on habitat in which listed threatened and endangered plants are believed to reside?; 5) Effects on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 6) Effects on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

The project requires minimal site disturbance. Soil boring locations will be selected carefully so that drilling rigs will avoid Nuttall's lotus if they are identified within the drilling area. Other heavy equipment will utilize the existing roads within the site, and if necessary, temporary dirt roads will be developed so that the potential for adverse impact to the Nuttall's lotus is minimized. Vadose zone excavation is proposed in and near Sherman Road and is not expected to occur in other areas of the site. There are no other documented rare or unique plants or ecological communities dependent on the plant-life at the site. There are no other documented sensitive, protected, listed, endangered, or threatened plant species, or species that have been identified for special management, or plant species and ecological communities subject to the jurisdiction of the Department of Fish and Game. Therefore, the potential for adverse impact to these plants is precluded.

The site is not on agricultural land, so agricultural acreage will not be reduced.

Ref: AM, RAW, RI/RFI

Findings:

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5. *Animal Life (Workbook, page 22)*

Description of Environmental Setting.

A large population of black-tailed jackrabbits inhabits North Island. Other mammals and reptiles observed at NASNI include lizards, skunks, opossums, gray foxes, ground squirrels, gophers, mice, voles, and rats. A Special Status species, the burrowing owl, is common on NASNI.

The ecology evaluation presented in the RI/RFI Report concluded that there is little wildlife use of IR Site 5, Unit 2, because of its small size and constant disturbance from vehicles and aircraft. However, burrowing owls have been observed to occasionally forage on the site; there is a burrowing owl colony delineated by signs adjacent to the site. Other wildlife that has been observed at the site includes rabbit, gopher, lizards, ants and mice. Migratory birds also have been observed in the vicinity of the site.

Ref: JEG, 1995; RI/RFI

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Effects on listed threatened or endangered animals?; 2) Effects on habitat in which listed threatened and endangered animals are believed to reside?; 3) Effects on species of animals listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 4) Effects on marine and terrestrial animal species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

The project requires minimal site disturbance. Soil boring locations will be selected carefully so that drilling rigs will avoid burrows if they are identified within the drilling area. Other heavy equipment will utilize the existing or temporary roads within the site so that the potential for adverse impact to sensitive species is minimized. Excavation activities are proposed in and near Sherman Road and are not anticipated in other areas of the site.

NASNI Natural Resources personnel have been notified of the proposed activities at this site.

Ref: RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6 Land Use (Workbook, page 24)

Description of Environmental Setting:

The site lies almost entirely within the final approach to the NASNI runway. No buildings or other permanent structures exist on or in the near vicinity of the site. Adjacent land use includes the golf course to the south, Sherman Road and the golf course to the northeast, Rogers Road and the runway to the northwest, and a continuation of the final runway approach to the southeast. An asphalt golf cart path traverses the site for use by golfers crossing between putting greens; joggers and bicyclists also use the asphalt path and the shoulders along Sherman and Rogers Roads.

The nearest buildings to the site include the following.

- Building #583 is a storage site vault and houses an emergency generator. It is located approximately 600 feet northwest of the site across Rogers Road at the northeast corner of the runway. Workers obtain supplies from the building but do not work in the building on a full-time basis.
- Building #1050 houses an above-grade diesel fuel tank and is located adjacent to Building #583. No workers work in the building.
- Building #559 is a PWC sewage disposal pump plant located approximately 400 feet west of the site across Rogers Road. Workers check the plant on a daily basis, but do not work in the building on a full-time basis.
- Building #513 is a four-car garage for use by residents of the married officers quarters discussed below. It is located approximately 500 feet west of the site.

The nearest residential area is located approximately 600 feet west of the site across Rogers Road. It encompasses two dwellings, including a duplex and a single-family dwelling. A second residential area is located approximately 1,000 feet northwest of the site on Wright Avenue. The NASNI Master Plan prepared by the Navy in 1991 controls land use at NASNI. Land use may not be changed without a variance from the Master Plan or a change of the Master Plan, as determined by the NASNI Commanding Officer and planning staff. Existing land use will not be changed by the proposed project. Except for designated work areas, storage areas, and access routes specifically assigned for use during field activities, all land resources outside the limits of work will be preserved in their present condition. Field support areas for temporary equipment

and materials staging will be identified and approved by the Navy Technical Representative prior to equipment mobilization.

Ref: AM, RAW

Analysis of Potential Impacts:

The project area is located on an active military base and will not alter the existing zoning or use of this property. The project will not alter the pattern, scale, or character of the general vicinity. There are no incompatible land-use issues associated with this project.

Ref:

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7. Natural Resources (Workbook, page 25)

Description of Environmental Setting:

There are no existing renewable energy sources, such as natural gas or oil, or known mineral resources at or in the vicinity of the site. Groundwater beneath the NASNI is classified to be of non-beneficial use pursuant to State Water Resources Control Board (SWRCB) Resolution No. 88-63, as incorporated into the 1995 RWQCB Water Quality Control Plan for the San Diego Basin (9). Under EPA guidelines (EPA, 1986), the insufficient quality of the groundwater qualifies it for a Class III (i.e., non-potable) designation, and it is not reasonably expected to supply a public drinking water system.

Gas, electric and water utilities are not impacted by this project. The project will require an estimated 1,500 gallons of diesel fuel and gasoline to fuel equipment during construction activities and approximately 150,000 gallons of water for chemical mixing.

Ref: RI/RFI; RAW

Analysis of Potential Impacts:

As discussed above, fuel consumption for project execution will be minimal. There are no significant natural resources at the site that will be exploited as a result of excavation activities. This work will not increase the rate of use or contribute to the depletion of natural resources in a significant way. There are no mining or oil production activities or other natural resource harvesting in the vicinity of the site. Existing golf course irrigation water supply will be sufficient to provide water for the project's use as well as for golf course irrigation.

Ref: : RI/RFI; RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

8. Risk of Upset (Workbook, page 26)

Description of Environmental Setting:

This project primarily involves soil sampling, installation of wells, limited vadose-zone excavation in and near Sherman Road, injection of chemical oxidants, and groundwater sampling. The SHSP included in the RAW provides appropriate safety procedures pertaining to the handling, storage, mixing, and injection of chemicals and establishes the policies and procedures that protect workers and the public from potential hazards posed by work at this site. The Navy considers safety the highest priority during work at a site containing potentially hazardous materials and has established a policy of minimizing exposure, which must be upheld on all projects. The SHSP and all site activities will be in compliance with the following regulations and guidelines:

- United States Department of Labor OSHA Standards, specifically
 - 29 CFR 1910.134: Respiratory Protection
 - 29 CFR 1910.120: Hazardous Waste Operations and Emergency Responses (HAZWOPER)
 - 29 CFR 1910.1200: Hazard Communication
- 29 CFR 1926: Safety and Health Regulations for Construction
- California Code of Regulations Title 8

- United States Environmental Protection Agency (EPA), Standard Operating Safety Guides, June 1992
- National Institute of Occupational Safety and Health (NIOSH)/OSHA/United States Coast Guard (USCG)/EPA, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, October 1985
- United States Army Corps of Engineers (USACE), Safety and Health Requirements Manual, Engineering Manual (EM) 385-1-1, September, 1996
- Navy/Marine Corps, Installation Restoration Manual, February 2000
- American National Standards Institute (ANSI), Practice for Respiratory Protection, Z88.2
- OHM, Health and Safety Procedures Manual, August 1996 (available on site).

Waste streams anticipated during this project include soil, liquid, personal protection equipment (PPE), and materials waste. Soil will be derived primarily from drill rig borings and limited excavation; liquid waste will be produced from well development, decontamination, and well sampling. The Waste Management Plan included in the RAW describes the procedures and documentation controls to be used in managing waste generated during the TCRA. Waste management will be implemented under the direction of the project's assigned transportation and disposal coordinator in accordance with the investigative derived waste management plan prepared for Naval Complex Coronado (PWC, 1999).

Waste characterization sampling will be performed in accordance with San Diego County Site Assessment and Mitigation Manual requirements (County of San Diego, 1999). Wastes will be transferred to NASNI Industrial Waste Treatment Plant or an appropriate offsite disposal facility. Waste will be transferred to the disposal facility utilizing the appropriate transport method and documentation (hazardous waste manifest, non-hazardous waste manifest, and/or bills of lading). PPE, plastic sheeting, and non-hazardous debris will be disposed of at the Navy-owned Miramar Class III landfill.

Ref: RAW; SHSP

Analysis of Potential Impacts:

As stated in the Workbook, upset conditions include not only events associated with natural disasters and associated unforeseen emergencies such as fire, but also those events more commonly called accidents. Accidents include those caused by human error, equipment malfunction or failure and sabotage. All requirements of the SHSP will be enforced during project activities to avoid potential accidents due to human error. Equipment will be maintained in good repair and will be used for its intended purpose only. Site access restrictions will be enforced as described in the SHSP.

The Navy anticipates a low potential risk of leaks of hazardous materials. If such spills did occur, it is believed based on site investigations and analytical data that only small amounts of

these materials would be at risk. However, because there is a potential for a spill to occur, the appropriate spill response materials will be available. The SHSP includes an emergency response section that provides response procedures for natural disasters, unforeseen emergencies, and accidents, including spills.

Because the *in situ* chemical injection reaction is exothermic, potential ignition sources will be identified and protected from excessive heat prior to chemical injection. Soil vapor sampling implemented during the pilot test to monitor potential vapor migration indicated limited increases in soil vapor contaminant concentrations in the near vicinity of the injection well. However, air monitoring of the breathing zone conducted for health and safety purposes during sample collection did not indicate detectable VOC concentrations.

All site access restrictions required by the SHSP will be enforced to ensure that pedestrians and bicyclists do not cross the site during site activities. The asphalt golf cart path will be re-routed around the project area, as necessary.

Ref: SHSP

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

9 Transportation/Circulation (Workbook, page 29)

Description of Environmental Setting.

Traffic volume and circulation at NASNI fall under the purview of the NASNI Staff Civil Engineering Department that periodically analyzes the on-base transportation infrastructure when producing the NASNI Master Plan. The 1991 NASNI Master Plan identifies vehicular access gates, major roadways and parking areas. The plan also identifies transportation issues including parking shortages and traffic congestion areas. Significant problems identified were a deficiency in on-base parking and traffic congestion during peak traffic hours at Bay Drive and Quentin Roosevelt Boulevard south of Flag Circle. The 1991 Master Plan identifies strategies for resolving the identified transportation issues. According to a 1995 Federal Environmental Impact Statement for another NASNI project, there has been a steady decrease in the population at NASNI due to military downsizing, which has decreased NASNI's traffic 20-50 percent since the 1991 Master Plan was approved.

NASNI has existing roadways that lead to the project site. The personnel assigned to this project are primarily assigned to work at NASNI and are currently present on base during business hours. Sherman Road and Rogers Road border Site 5, Unit 2, to the northeast and northwest, respectively. Peak travel hours on these roads coincide with the Gate 5 (Ocean Boulevard) hours of operation: 5:15 a.m. - 8:30 a.m., 11:00 a.m. - 1:00 p.m., and 2:15 p.m. - 6:00 p.m. The traffic level during peak hours is moderate. The posted speed limit along both roads in the vicinity of the site is 30 miles per hour. Pedestrians and bicyclists utilize the bike lanes and shoulders adjacent to Sherman and Rogers Roads. Traffic along Rogers Road gives approaching aircraft the right-of-way.

If hazardous waste requiring transportation and disposal is generated by the project, trucks hauling the waste will be routed along the Silver Strand Highway, State Route 75, rather than through the City of Coronado.

Ref: NASNI Master Plan, RAW

Analysis of Potential Impacts:

The proposed project will increase traffic temporarily in the vicinity of the site during field activities, but this increase is anticipated to be insignificant. Potential temporary increases in traffic hazards to motor vehicles, bicyclists or pedestrians during field activities could arise due to heavy equipment entering and exiting the site. In order to minimize these hazards, designated routes will be established for entering and exiting the site. All trucks and heavy equipment will have working backup alarms, and will utilize "spotters" for backing maneuvers. The contractor will follow all traffic rules. Company vehicles will yield to all bikes and pedestrians. Work will proceed in a manner that least interferes with other base activities.

Limited vadose-zone excavation in and near Sherman Road will be conducted in accordance with traffic control plans prepared for and approved by the NASNI ROICC Office and in accordance with the SHSP. Sherman Road will be restored to its pre-construction condition following excavation activities.

Prior to moving any vehicles or equipment to the site, the contractor will coordinate with flight line safety officials to mitigate potential airfield runway hazards.

Limited amounts of hazardous waste potentially could be disposed of offsite. The City of Coronado requires notification of transportation from the Navy when five or more trucks per day will be conveying hazardous materials or waste through the city. This project is not expected to trigger City of Coronado requirements.

Ref: RAW; SHSP

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10. Public Services (Workbook, page 31)

Description of Environmental Setting:

NASNI has a full range of public services including housing, educational, recreational, fire, security and medical facilities. Emergency response at NASNI is provided through the Federal Fire Department and the NASNI Security Department. In addition to an on base fire station, NASNI fire stations have a mutual aid agreement with the City of Coronado and the City of San Diego. The agreement provides for unobstructed access to federal enclaves, including NASNI by City of Coronado fire fighting units to respond to a call. Additionally, a Hazardous Materials Unit from the nearby 32nd Street Naval Station is on call for NASNI. The NASNI roads are built to military standards, which ensure adequate flow and load bearing capacity for military and civilian vehicles.

Ref: NASNI Master Plan

Analysis of Potential Impacts:

The need for public services is dependent on the local population. The military population in the area is dependent on the strategic policies of the Department of Defense, the defense missions assigned to military bases, and the level of staffing needed to carry out the missions assigned to a particular base.

Since the project will not increase the military population in the area, public services such as fire and police protection, schools, roads, hospitals, and other facilities will not be impacted. This project will not create public service demands beyond that of the current level. The current public services will be adequate.

Ref: NASNI Master Plan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

11. *Energy (Workbook, page 32)*

Description of Environmental Setting:

The primary demand for energy during the project is for fuel to operate vehicles and heavy equipment.

Ref: NASNI Master Plan

Analysis of Potential Impacts:

The proposed work does not involve, address, nor result in the need for substantial amounts of energy, nor the need for new or expanded utility systems. The duration of the project is expected to be approximately one year. All vehicles will run on diesel or gasoline. Approximately 1,500 gallons of diesel or gasoline are anticipated to be used during project activities.

Ref: RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12. Utilities (Workbook, page 32)

Description of Environmental Setting.

The only utility that will be used for this project will be water for drilling activities, decontamination procedures, and chemical mixing. Electricity will be provided by a portable generator or from the contractor trailer compound, if needed.

Known underground utilities at the site include two storm sewers, a water line near Rogers Road and a near-surface electrical conduit that provides power to the runway-approach lights crossing the site. Although additional subsurface utilities are not anticipated, a geophysical survey will be conducted prior to drilling activities to "clear" each boring location.

Ref: NASNI Facility Maps

Analysis of Potential Impacts.

The existing water supply used for golf course irrigation adjacent to the site will be sufficient to satisfy both irrigation requirements and the water need for the project.

The underground utility survey will identify previously unknown underground utilities that will be worked around.

Ref: RAW

Findings.

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

13. Noise (Workbook, page 32)

Description of Environmental Setting:

Site 5, Unit 2, is located almost entirely within the final approach to a NASNI runway. The nearest building is approximately 400 feet from the site and adjacent to the runway. The nearest residential area is approximately 600 feet from the site and adjacent to the runway. Residential receptors are in closer proximity to the runway than to the project site. There are no schools within a 1,000-foot radius of the site. Baseline noise levels associated with runway traffic range from approximately 120 to 140 decibels (dBA).

Project noise levels associated with the use of drill rigs are anticipated to range from approximately 95 to 110 dBA at a distance of 1 meter from the noise source. Drill rig operation will create the greatest noise levels associated with the project. Drill rigs will be operated only during daylight hours. Field activities requiring drill rigs are anticipated to require approximately 20 working days.

Ref: SHSP

Analysis of Potential Impacts:

The construction phase of this project will increase the ambient noise levels immediately adjacent to the site. The increase in noise, however, will be masked by baseline noise associated with jet engines and will have no impact on other work areas, residential areas, or children.

The workers at the site will participate in hearing conservation and protection program that complies with the California Occupational Health and Safety Administration (Cal/OSHA) regulations, Title 8 California Code of Regulations (CCR) Sections 5097 and 5098 according to the Site Health and Safety Plan (SHSP).

Ref: SHSP

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

14. Public Health and Safety (Workbook, page 34)

Description of Environmental Setting:

The proposed removal action will require well installations, construction of a chemical mixing area, chemical injection activities, soil and groundwater sampling, and limited vadose-zone excavation in and near Sherman Road. These activities will be conducted within an access-controlled area. Construction activities will be performed in a manner that ensures worker and equipment safety. Traffic controls will be maintained during work in and near Sherman Road.

Ref: RAW; SHSP

Analysis of Potential Impacts:

Heavy equipment used during remediation activities, including drilling and installation of injection wells and limited excavation, will conform to OSHA specifications. The work areas will be properly fenced or delineated to limit access to authorized personnel and to maintain security after hours.

Potential exposures and protection procedures for workers engaged in these construction activities are addressed in detail in the SHSP prepared in association with the RAW. Measures will be taken to reduce emissions and the associated impacts on workers during limited vadose-zone excavation in and near Sherman Road. Water trucks and hoses will be available for dust control during excavation activities. Workers within the controlled area will wear appropriate safety equipment and take appropriate safety measures in accordance with the SHSP. Air monitoring will be conducted as discussed in the SHSP.

Areas designated for the temporary stockpiling of excavated materials will be lined and covered with plastic having a minimum thickness of 20 mil. Traffic control measures will be initiated and maintained along Sherman Road.

Ref: SHSP

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

15. Aesthetics (Workbook, page 38)

Description of Environmental Setting:

Site 5, Unit 2, is located almost entirely within the final approach to a NASNI runway. Runway-approach lights and maintenance roads cross the site. The above-grade monuments of the existing groundwater monitoring wells installed during RI/RFI assessment are visible throughout the site. Vegetation is mowed to several inches above grade.

The proposed project includes the installation of approximately 50 injection wells that will be completed above grade with monument-style housings in concrete pads. A temporary chemical storage area will be constructed utilizing portable secondary containment and temporary fencing. Soil and aqueous wastes generated during well installation and development will be drummed for temporary on-site storage in the chemical storage area. Several temporary dirt roads may be installed as needed for access to the wells during the chemical injection activities.

Ref: RI/RFI; RAW

Analysis of Potential Impacts.

Given current site conditions and the minimal site disruption described above, the aesthetic impacts from this project will be minimal and temporary. The project site is within a secured military base. There will not be any new light or glare created from this work, nor will it block any views open to the public.

Ref: RAW

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Potentially Significant Unless Mitigated</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

16. Cultural/Paleontological Resources (Workbook, page 39)

Description of Environmental Setting:

The earliest documented archaeological inventory on NASNI was done by Howard O. Welty around 1917 and 1918. Welty mapped locations and cursorily described five prehistoric sites

(since incorporated in the California Archaeological Inventory (CAI) as CA-SDI-60 through -- 64). These sites were distributed along the seaward and bay-mouth shorelines on the southern margin of NASNI. All five sites are described as shell middens of various sizes and densities, with some degree of post-depositional aeolian and /or tidal erosion. Beyond a minor excavation at SDI-64 described by Welty, no subsequent excavational archaeological research is documented for NASNI.

Archeological testing and a National Register Assessment were performed at NASNI in 1995 (Gross, et. al., 1996). Based on these surveys, there is no surficial evidence of significant cultural resources.

IR site 5, Unit 2, is located in an area of artificial fill, one of four such areas on NASNI that were previously tidal flats or were covered by shallow water. Cultural or paleontological resources are not likely to exist in the area of the site because the site is located on artificial fill. The site does not exhibit any characteristics for preservation under the Archeological Resources Protection Act, the National Historic Preservation Act, or the Historic Sites, Buildings, and Antiquities Act.

Ref: Memorandum, 11-Oct-94, from NASNI Archaeologist (Code 18N1); BNI, 1998

Analysis of Potential Impacts.

Site 5, Unit 2, has no known prehistoric, historic, ethnographic, or paleontological resources. If potential cultural resources are discovered during field activities, the activity will be ceased pending proper archaeological investigation.

Ref: Memorandum, 11-Oct-94, from NASNI Archaeologist (Code 18N1); BNI, 1998

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

17. Cumulative Effects (Workbook, page 42)

Description of Environmental Setting.

Several investigations at Site 5, Unit 2, related to the proposed removal action have occurred at the site as follows. A remedial investigation took place in 1995 and a natural attenuation study took place in 1998 (BNI, 1998; Parsons, 1999). These investigations culminated in the proposed removal action. Pilot testing of the *in situ* chemical oxidation technology at the site has been completed. The probable future work at the site entails monitored natural attenuation (groundwater sampling and analysis from existing wells).

Other remedial projects currently in progress at NASNI are not in the general vicinity of Site 5, Unit 2.

Ref: RI/RFI; RAW

Analysis of Potential Impacts.

This project will be accomplished primarily by using an innovative technology, however no emerging (new) technologies are proposed. New technologies will not be required to manage wastes or for any other aspect of the work. The work will not lead to a larger construction project, or a series of projects. The duration and complexity of the job are minimal and will not affect housing, public services, local infrastructure, or the local population. Impacts to existing traffic will be minimal and primarily associated with the limited excavation in and near Sherman Road. A review of other activities at NASNI and the activities associated with this project demonstrate that impacts from this project are minimal. There will be no cumulative impact on the environment, noise, air, or other natural resources.

Ref: RAW

Findings.

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

18. Population/Housing/Recreation (Workbook, page 43)

Description of Environmental Setting.

The population of San Diego County was approximately 2.5 million, as measured by the 1990 Census, and the city of San Diego has a population of about one million. The City of Coronado has a population of approximately 26,500 residential, occupying an area of 7.45 square miles. Approximately 15,000 non-residential military personnel are located at NASNI. A large part of NASNI is within the city limits of Coronado. The remainder is in the City of San Diego.

NASNI is a major source of employment for the County of San Diego. The Navy presents in their 1991 Master Plan that there are approximately 22,000 people employed at the Base. This figure includes all ship and aviation personnel, and civilians. The civilian population working at NASNI, estimated at 8,000, is considered permanent, long-term population for NASNI. Most of the officers and enlisted staff at NASNI are there on a temporary basis, with a tour of duty consisting of no more than 4 or 5 years.

A study was conducted in 1994 by SAIC which provides population totals by sex and age group for each of the five census tracts immediately adjacent to NASNI. The median age for the five tracts varies from 21.8 years to 50.3 years. Children and elderly are considered sensitive populations. The population of children from 0 to 9 years of age in the five tracts ranges from 2 to 12 percent, and the percentage of elderly 65 years and up ranges from 1 to 22 percent.

Ref: NASNI Master Plan

Analysis of Potential Impacts:

This project will have no impact on the population, housing, or recreational opportunities of the surrounding area.

Ref: NASNI Master Plan

Findings:

<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

19. *Mandatory Findings (Workbook, page 44)*

	<i>Potentially Significant Impact</i>	<i>Potentially Significant Unless Mitigated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Does the project have environmental effects which will cause substantial adverse effect on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. DETERMINATION OF DE MINIMIS

On the basis of this Special Initial Study:

☒ I find that there is no evidence before the Department that the proposed project will have a potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depend. A NEGATIVE DECLARATION with a DE MINIMIS IMPACT FINDING will be prepared.

VI. DETERMINATION OF SIGNIFICANT EFFECT

On the basis of this Initial Study:

☒ I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project which would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

 Project Manager 714-484-5428 July 30, 2001
DTSC Project Manager Signature Title Telephone # Date

 Branch Chief, OMF (714) 484-5456 July 30, 2001
DTSC Branch/ Unit Chief Signature Title Telephone # Date

ATTACHMENT A

SPECIAL
INITIAL STUDY
REFERENCE LIST

for

Naval Air Station, North Island, San Diego, California

ASLA & Associates. 1991. Master Plan for Naval Air Station North Island, San Diego, California. N68711-C-0038. December.

Bechtel National, Inc.. 1998. Remedial Investigation/RCRA Facility Investigation Report Site 5 –Golf Course Disposal Area, Naval Air Station North Island, San Diego, CA. October.

Brown and Caldwell. 1983. Initial Assessment Study of Naval Air Station North Island, San Diego, CA. September.

DON. 1999. Action Memorandum for Restoration Site 5 – Unit 2, Naval Air Station, North Island, San Diego, CA.

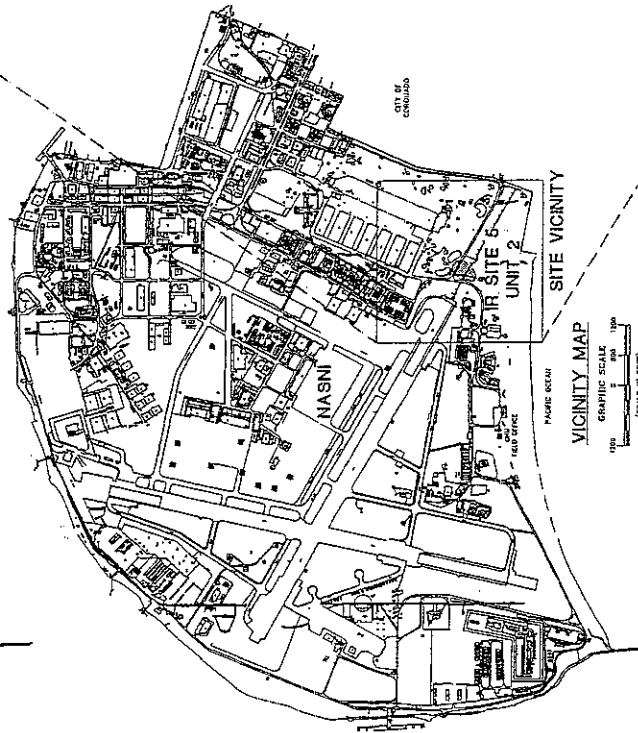
Jacobs Engineering Group, Inc. 1995. Naval Air Station North Island, San Diego, California. Remedial Investigation/RCRA Facility Investigation Report Site 9 Chemical Waste Disposal Area. October.

Memorandum, 11-Oct-94, from NASNI Archaeologist (Code 18N1); BNI, 1998

OHM. 2001. Site Remedial Action Work plan for Restoration Site 5 – Unit 2, Naval Air Station, North Island, San Diego, CA.

OHM. 2001. Site Health and Safety Plan for Restoration Site 5 – Unit 2, Naval Air Station, North Island, San Diego, CA.

file: april96.Sis



GRAPHIC SCALE:
MILE
KMS
(SCALE IN FEET)

[illegible]

References:
 Rick Engineering, 1904
 Bechtel National, Inc. 1996
 Parsons Engineering Science, Inc. 1995

